

***In the Claims:***

This listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A method for producing tissue cells wherein the tissue cells are myocardial cells, the method comprising the steps of:

obtaining pluripotent stem cells by selectively culturing iris pigment epithelial cells by a floated coagulated mass culturing technique, the iris pigmented epithelial cells being isolated from an eyeball of an animal; and

obtaining tissue cells from the pluripotent stem cells by differentiating the pluripotent stem cells into one or more types of tissue cells by culturing the pluripotent stem cells under differentiation inducing conditions.

2. (original) The method according to Claim 1, wherein the animal is a chicken, a mouse, a rat, or a human.

3. (previously presented) The method according to Claim 1, wherein the animal is a postnatal individual animal.

4. (previously presented) The method according to Claim 1, wherein the pluripotent stem cells are Oct-3/4 positive and/ or tridermic differentiable.

5. (previously presented) The method according to Claim 1, wherein the isolating of the iris pigmented epithelial cells includes:

an iris-tissue-extirpating step of extirpating iris tissue from the eyeball of the animal; and

an iris-pigmented-epithelial-cell-separating step of separating iris pigmented epithelium from the iris tissue thus extirpated.

6. (previously presented) The method according to Claim 5, wherein the iris-tissue-extirpating step includes:

an iris-tissue-excising stage of excising only iris tissue from the eyeball of the animal;

an enzyme treatment stage of subjecting the excised iris tissue to enzyme treatment; and

an iris-tissue-restoring stage of restoring, by using a culture medium containing serum, the iris tissue weakened by the enzyme treatment.

7. (cancelled)

8. (previously presented) The method according to Claim 1, wherein the culturing under the differentiation inducing condition is conducted with serum.

9. (original) The method according to Claim 8, wherein the serum is fetal calf serum or avian serum.

10. (previously presented) The method according to Claim 9, wherein, in the culturing under the differentiation inducing condition, a growth factor is further used.

11. (original) The method according to Claim 10, wherein the growth factor is EGF or FGF.

12-14. (withdrawn)

15. (cancelled)

16. (cancelled)

17. (new) The method of claim 1, further comprising testing for expression of at least one gene specific for myocardial cells.

18. (new) The method of claim 17, wherein the gene specific for myocardial cells is selected from the group consisting of GATA4, Nkx2.5, cMyBP, and myosin.

19. (new) A method for culturing cells comprising:

obtaining iris pigmented epithelial cells from iris tissue:

dissociating the pigmented epithelial cells into isolated cells:

culturing the cells as a floated-coagulated-mass in serum free media supplemented with N2 supplement (Invitrogen Corporation) in combination with fibroblast growth factor-2 (FGF2); or N2 supplement, leukemia inhibitory factor (LIF), and stem cell factor (SCF).

20. (new) The method of claim 19, further comprising subsequently culturing the cells as a floated-coagulated-mass in serum containing media.

21. (new) The method of claim 20, wherein the serum containing media further contains at least one growth factor from the group consisting of FGF2, epidermal growth factor, ciliary neurotrophic factor (CNTF), and retinoic acid (RA).

22. (new) The method of claim 20, further comprising testing the cells for expression of at least one gene specific for myocardial cells.

23. (new) The method of claim 20, further comprising subsequently culturing the cells in a dish coated with extracellular matrix components.

24. (new) The method of claim 19, further comprising testing the cells at least one gene specific for stem cells.

25. (new) The method of claim 24, wherein the gene specific for stem cells is Oct-3/4.